

### Claims

1. Functional food containing a physiologically compatible phospholipid-containing stable matrix consisting of a supporting material and a bioactive component.
2. Functional food as claimed in claim 1, characterized in that it is a liquid, solid or semiliquid form of administration.
3. Functional food as claimed in claim 2, characterized in that it is a tea, coffee, milk or mineral drink, soft, power or energy drink, a vegetable, fruit or bark juice or nectar, liquid spice, elixir or tonic, soft drink or beer.
4. Functional food as claimed in claim 2, characterized in that it is a cereal product, a spice, an extract of plants, fruits or bark, a bar, pasta, sweet, slice or soft product such as gummy and foam product.
5. Functional food as claimed in claim 2, characterized in that it is a fermented milk product such as butter, yogurt, cottage cheese, kumis, kefir, ready-to-use sauces, margarine, bread spread and crème.
6. Specialized food containing a physiologically compatible phospholipid-containing stable matrix consisting of a supporting material and a bioactive component.
7. Specialized food as claimed in claim 6, characterized in that it is a food for tube feeding.
8. Food as claimed in one of the claims 1 to 7, characterized in the matrix being pellets, granulates or capsules especially microcapsules, preferably composed of a coat and a bioactive core.
9. Food as claimed in one of the claims 1 to 8, characterized in that the matrix contains  $\geq 5$  % by weight and in particular  $\geq 15$  % by weight in each case

based on the starting material of acetone-insoluble phospholipid components as the bioactive component.

10. Food as claimed in one of the claims 1 to 9, characterized in that the matrix contains between 5 and 90 % by weight, in particular between 20 and 80 % by weight and particularly preferably between 40 and 70 % by weight in each case based on the starting material of acetone-insoluble phospholipid components.
11. Food as claimed in one of the claims 1 to 10, characterized in that the matrix contains phosphatidyl serine, phosphatidyl choline, phosphatidyl ethanolamine, phosphatidyl inositol, phosphatidyl glycerol, lyso variants thereof and/or derivatives thereof as acetone-insoluble components, and/or sphingophospholipids in particular sphingomyelin.
12. Food as claimed in one of the claims 1 to 11, characterized in that the supporting material of the matrix contains (un)modified carbohydrates and proteins, hydrophobic materials such as waxes, triglycerides, lipids and polymers or mineral components such as silicates and mixtures thereof.
13. Food as claimed in claim 12, characterized in that the carbohydrates are starch (derivatives), mono- and disaccharides and their sugar alcohols, glucose syrup, dextrans and hydrocolloids such as alginates, pectins, chitosan and cellulose (derivatives).
14. Food as claimed in one of the claims 12 or 13, characterized in that the proteins are plant, animal or microbial proteins such as zein, gluten, gelatin, casein or whey proteins, single-cell proteins, proteins from algae or texturized proteins or mixtures thereof.
15. Food as claimed in one of the claims 1 to 14, characterized in that the proportion of supporting material is  $\leq 95$  % by weight and in particular between 30 and 80 % by weight based on the total weight of the matrix.

16. Food as claimed in one of the claims 1 to 15, characterized in that the total matrix has a diameter between 0.1  $\mu\text{m}$  and 5.0 mm and in particular 0.5 to 2.5 mm especially in a capsule form.
17. Food as claimed in one of the claims 1 to 16, characterized in that the matrix contains additional bioactive substances such as amino acids, vitamins, polyphenols, carbohydrates, lipids, trace elements, mineral substances and suitable derivatives thereof.
18. Food as claimed in one of the claims 1 to 17, characterized in that the matrix is spherical or has a lens shape.
19. Food as claimed in one of the claims 1 to 18, characterized in that it contains the matrix as microcapsules having a preferred diameter between 0.5 and 500  $\mu\text{m}$ .
20. Food as claimed in one of the claims 1 to 19, characterized in that the matrix has liquid contents.
21. Food as claimed in one of the claims 1 to 20, characterized in that the matrix develops a delayed release especially in the gastro-intestinal tract (GI tract).
22. Use of the food as claimed in one of the claims 1 to 21 to prevent elevated serum cholesterol levels and diabetes symptoms, to strengthen mental fitness, exercise tolerance and fitness.